L	Hits	Search Text	DB	Time stamp
Number 1	2849	agent\$1 near20 rule\$1	USPAT;	2004/07/06
			EPO; JPO; DERWENT	11:17
2	72824	(predict\$4 or forecast\$3 or fore adj cast\$3	USPAT;	2004/07/06
		or model\$3 or simulat\$4) near10 (chang\$3	EPO; JPO;	10:59
		or impact\$3 or econom\$3 or environment\$2 or difference\$1)	DERWENT	
3	200	(agent\$1 near20 rule\$1) and ((predict\$4 or	USPAT;	2004/07/06
		forecast\$3 or fore adj cast\$3 or model\$3 or simulat\$4) near10 (chang\$3 or impact\$3 or econom\$3 or environment\$2 or difference\$1))	EPO; JPO; DERWENT	10:30
4	29246	(predict\$4 or forecast\$3 or fore adj cast\$3	USPAT;	2004/07/06
		or model\$3 or simulat\$4) near10 (global\$2 or communit\$3 or improv\$5 or militar\$4 or campaign\$3)	EPO; JPO; DERWENT	11:16
5	220	(agent\$1 near20 rule\$1) and (((predict\$4 or	USPAT;	2004/07/06
		forecast\$3 or fore adj cast\$3 or model\$3 or	EPO; JPO;	11:01
		simulat\$4) near10 (chang\$3 or impact\$3 or econom\$3 or environment\$2 or	DERWENT	
		difference\$1)) or ((predict\$4 or forecast\$3		
		or fore adj cast\$3 or model\$3 or simulat\$4)		
		near10 (global\$2 or communit\$3 or		
		improv\$5 or militar\$4 or campaign\$3)))		
6	8380	(predict\$4 or forecast\$3 or fore adj cast\$3	USPAT;	2004/07/06
		or model\$3 or simulat\$4) near10 (financ\$5	EPO; JPO;	11:16
		or bank\$3 or market\$3)	DERWENT	
7	2718	agent\$1 near15 rule\$1	USPAT;	2004/07/06
			EPO; JPO;	11:17
			DERWENT	
8	9876	(agent\$1 or bot\$1) near15 rule\$1	USPAT;	2004/07/06
			EPO; JPO;	11:17
_			DERWENT	
9	1014	((agent\$1 or bot\$1) near15 rule\$1) and	USPAT;	2004/07/06
		(((predict\$4 or forecast\$3 or fore adj cast\$3	EPO; JPO;	11:18
		or model\$3 or simulat\$4) near10 (chang\$3	DERWENT	
		or impact\$3 or econom\$3 or environment\$2		
		or difference\$1)) or ((predict\$4 or		
1		forecast\$3 or fore adj cast\$3 or model\$3 or		
		simulat\$4) near10 (global\$2 or communit\$3		
		or improv\$5 or militar\$4 or campaign\$3)) or		
		((predict\$4 or forecast\$3 or fore adj cast\$3		
		or model\$3 or simulat\$4) near10 (financ\$5		
		or bank\$3 or market\$3)))	<u> </u>	<u> </u>

10	3	(((agent\$1 or bot\$1) near15 rule\$1) and	USPAT;	2004/07/06
		(((predict\$4 or forecast\$3 or fore adj cast\$3	EPO; JPO;	11:21
		or model\$3 or simulat\$4) near10 (chang\$3	DERWENT	
		or impact\$3 or econom\$3 or environment\$2		•
		or difference\$1)) or ((predict\$4 or		
		forecast\$3 or fore adj cast\$3 or model\$3 or		
		simulat\$4) near10 (global\$2 or communit\$3		
		or improv\$5 or militar\$4 or campaign\$3)) or		
		((predict\$4 or forecast\$3 or fore adj cast\$3		
		or model\$3 or simulat\$4) near10 (financ\$5		
		or bank\$3 or market\$3)))) and		
		(microsimulat\$5 or micro adj2 (simulat\$5 or		
		model\$3))		
11	220	(((agent\$1 or bot\$1) near15 rule\$1) and	USPAT;	2004/07/06
		(((predict\$4 or forecast\$3 or fore adj cast\$3	EPO; JPO;	11:33
		or model\$3 or simulat\$4) near10 (chang\$3	DERWENT	
		or impact\$3 or econom\$3 or environment\$2		
		or difference\$1)) or ((predict\$4 or		
		forecast\$3 or fore adj cast\$3 or model\$3 or		
		simulat\$4) near10 (global\$2 or communit\$3		
		or improv\$5 or militar\$4 or campaign\$3)) or		
		((predict\$4 or forecast\$3 or fore adj cast\$3		
		or model\$3 or simulat\$4) near10 (financ\$5		
		or bank\$3 or market\$3)))) and 706/\$.ccls.		
12	254	((agent\$1 or bot\$1) near15 rule\$1) near70	USPAT;	2004/07/06
		(predict\$5 or forecast\$3 or fore adj cast\$3	EPO; JPO;	11:34
		or model\$3 or simulat\$4)	DERWENT	
13	65	(((agent\$1 or bot\$1) near15 rule\$1) near70	USPAT;	2004/07/06
		(predict\$5 or forecast\$3 or fore adj cast\$3	EPO; JPO;	14:02
		or model\$3 or simulat\$4)) and 706/\$.ccls.	DERWENT	
14	189	(((agent\$1 or bot\$1) near15 rule\$1) near70	USPAT;	2004/07/06
		(predict\$5 or forecast\$3 or fore adj cast\$3	EPO; JPO;	14:03
		or model\$3 or simulat\$4)) not ((((agent\$1 or	DERWENT	
		bot\$1) near15 rule\$1) near70 (predict\$5 or		
		forecast\$3 or fore adj cast\$3 or model\$3 or		
	1	simulat\$4)) and 706/\$.ccls.)		

```
Executing TD599
HILIGHT set on as '%'
>>>File 20 processing for CAST? stopped at CASTLERIG
Processing
Processing
Processed 10 of 15 files ...
Completed processing all files
         2754351 AGENT?
        11930206 ECONOM?
         2425228 MILITAR?
         3367759 PREDICT?
         3194653 FORECAST?
           95263 FORE
         1523431 CAST?
            1071 FORE (W) CAST?
                 (AGENT? OR ECONOM? OR MILITAR?) (15N) (PREDICT? OR
         684604
                  FORECAST? OR FORE (W) CAST?)
? e au=pryor r
      Items Index-term
Ref
        14 *AU=PRYOR R
E1
         10 AU=PRYOR R A
E2
E3
         1 AU=PRYOR R E
         1 AU=PRYOR R G L
E4
E5
         2 AU=PRYOR R J
E6
         1 AU=PRYOR R L
E7
         3 AU=PRYOR R N
E8
        19 AU=PRYOR R W
E9
         1 AU=PRYOR RAY
E10
         2 AU=PRYOR ROBERT J
E11
         1 AU=PRYOR ROGER W
E12
         6 AU=PRYOR S
         Enter P or PAGE for more
? s e1,e5
>>>One or more prefixes are unsupported
>>> or undefined in one or more files.
              14 AU=PRYOR R
              2 AU=PRYOR R J
      S2
              16 E1, E5
? e au=pryor, r
Ref
      Items Index-term
E1
         0 *AU=PRYOR, R
         7 AU=PRYOR, R.
E2
        23 AU=PRYOR, R. A.
E3
         1 AU=PRYOR, R. D.
E4
        23 AU=PRYOR, R. J.
E5
         4 AU=PRYOR, R. L.
E6
         9 AU=PRYOR, R. W.
E7
         1 AU=PRYOR, RICHARD
E8
         1 AU=PRYOR, ROB
E9
         2 AU=PRYOR, ROBERT
E10
         1 AU=PRYOR, ROBERT G L
E11
         2 AU=PRYOR, ROBERT G. L.
E12
         Enter P or PAGE for more
? s e2,e5,e8
>>>One or more prefixes are unsupported
>>> or undefined in one or more files.
              7 AU=PRYOR, R.
              23 AU=PRYOR, R. J.
              1 AU=PRYOR, RICHARD
```

exs

```
31 E2, E5, E8
      S3
? s s1 and (s2 or s3)
          684604 S1
              16 S2
              31 S3
               1 S1 AND (S2 OR S3)
      S4
? t s4/6/1
           (Item 1 from file: 6)
 4/6/1
1955610 NTIS Accession Number: DE96006817
  Development of Aspen: A microanalytic simulation model of the US economy
  Feb 96
? t s4/9/1
 4/9/1
           (Item 1 from file: 6)
DIALOG(R) File
                6:NTIS
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1955610 NTIS Accession Number: DE96006817
  Development of Aspen: A microanalytic simulation model of the US economy
  %Pryor, R. J. %; Basu, N.; Quint, T.
  Sandia National Labs., Albuquerque, NM.
  Corp. Source Codes: 068123000; 9511100
  Sponsor: Department of Energy, Washington, DC.
  Report No.: SAND-96-0434
  Feb 96
          12p
  Languages: English
  Journal Announcement: GRAI9617; ERA9629
  Sponsored by Department of Energy, Washington, DC.
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Springfield, VA, 22161, USA.
  NTIS Prices: PC A03/MF A01
  Country of Publication: United States
  Contract No.: AC04-94AL85000
  This report describes the development of an agent-based microanalytic
simulation model of the US economy. The microsimulation model capitalizes on recent technological advances in evolutionary learning and parallel
computing. Results are reported for a test problem that was run using the
model. The test results demonstrate the model's ability to %predict%
 business-like cycles in an %economy% where prices and inventories are
allowed to vary. Since most %economic% %forecasting% models have difficulty
%predicting% any kind of cyclic behavior. These results show the potential
of microanalytic simulation models to improve economic policy analysis and
to provide new insights into underlying economic principles. Work already
has begun on a more detailed model.
 Descriptors: %Economy%; Computerized Simulation; %Forecasting%; Industry;
Investment; Mathematical Models; Parallel Processing; Sales
  Identifiers: EDB/290201; NTISDE
  Section Headings: 97G (Energy--Policies, Regulations, and Studies)
```

(Item 1 from file: 103) DIALOG(R) File 103: Energy SciTec (c) 2004 Contains copyrighted material. All rts. reserv. 03975276 EDB-96-059036 Title: Development of %Aspen%: A %microanalytic% %simulation% %model% of the US %economy% Author(s)/Editor(s): Pryor, R.J.; Basu, N.; Quint, T. Corporate Source: Sandia National Labs., Albuquerque, NM (United States) (Code: 9511100) Sponsoring Organization: DOE; USDOE, Washington, DC (United States) Publication Date: Feb 1996 (12 p) Report Number(s): SAND-96-0434 Order Number: DE96006817 Contract Number (DOE): AC04-94AL85000 Document Type: Report Language: English Journal Announcement: EDB9608 Availability: OSTI; NTIS; GPO Dep. Distribution: (Report):A (MF):4 MN-905 ERA (Energy Research Abstracts); ETD (Energy Technology Data Subfile: Exchange); NTS (NTIS). TIC (Technical Information Center) US DOE Project/NonDOE Project: P Country of Origin: United States Country of Publication: United States Abstract: This report describes the development of an %agent%-based microanalytic simulation model of the US %economy%. The microsimulation model capitalizes on recent technological advances in evolutionary learning and parallel computing. Results are reported for a test problem that was run using the model. The test results demonstrate the model's ability to %predict% business-like cycles in an %economy% where prices and inventories are allowed to vary. Since most %economic% forecasting models have difficulty %predicting% any kind of cyclic behavior. These results show the potential of microanalytic simulation models to improve %economic% policy analysis and to provide new insights into underlying %economic% principles. Work already has begun on a more detailed model.

Major Descriptors: %ECONOMY% -- MATHEMATICAL MODELS
Descriptors: COMPUTERIZED SIMULATION; FORECASTING; INDUSTRY; INVESTMENT;
PARALLEL PROCESSING; SALES

Set	Items	Description
S1	20953	(AGENT OR AGENTS OR BOT OR BOTS) (10N) (RULE OR RULES) OR MO-
	DU	L?(10N)(DECISION(W)RULE?)
S2	169070	(PREDICT? OR FORECAST? OR FORE(W) CAST? OR MODEL? OR SIMULA-
	T?)(10N)(CHANG? OR IMPACT? OR INFLUEN? OR DIFFERENCE?)(10N)(E-
		NOM? OR ENVIRONMENT? OR GLOBAL? OR PLANT OR MILITAR? OR CAM-
		IGN?)
S3	458	S1 AND S2
S4	342	RD (unique items)
S5	121	S4 NOT PY>1996
S6	225	(AGENT OR AGENTS OR BOT OR BOTS OR MODUL?) (7N) (DECISION(W) -
_	RU	LE?)
(\$7)	8	S5 AND S6
S8	82	S6 NOT PY>1996
S9	61	RD (unique items)
S10	20	S9 AND (PREDICT? OR FORECAST? OR FORE(W) CAST?)
(\$11)	12	S10 NOT S7
? logof	f	

.

at least title

L1		11	SEA (PREDICT? OR FORECAST? OR FORE CAST? OR MODEL? OR SIMU
LAT			?)(5A)(CHANGE# OR CHANGING OR ACTIVIT?)(5A)ECONOM?
T 0		1250	SEA (PREDICT? OR FORECAST? OR FORE CAST? OR MODEL? OR SIMU
L2		1230	SEA (FREDICT: OR FORECAST: OR FORE CAST: OR MODEL: OR SING
LAT			?) (10A) ECONOM?
т Э		20	SEA L2 AND 705/CLAS
L3 L4			SEA L3 AND RULE#
			SEA LS AND ROLL# SEA DECISIONMAKER# OR DECISION(W) (MAKER# OR UNIT#)
L5	DEL		S L3 AND L4
L6	DEL		SEA L4 AND L5
L6 L7		_	SEA L3 AND L5
Г8 Г			SEA L2 AND L5
ь га		_	SEA AGENT##(P)L5
			SEA L5(P)RULE#
L10			SEA L10 AND 705/CLAS
L11			SEA L10 AND 7037CLAS
			SEA L10 NOT L11 SEA L12 AND 364/CLAS
L13			SEA LIZ AND 364/CLAS SEA (HOUSEHOLD## OR HOUSE HOLD# OR INDIVIDUAL##) AND GOVER
L14		0/2	SEA (HOUSEHOLD## OK HOUSE HOLD# OK INDIVIDUAL##) AND GOVER
NME			NT## AND (INDUSTR### OR FIRM##) AND BANK###
L15		6	SEA L5 AND L14
L15		-	SEA MICROECONOMIC? OR MICROSIMULAT? OR MICROANALYTIC?
L17			SEA L5 AND L16
L18		_	SEA L14 AND L16
L19		_	SEA L2 AND L16
L20		_	SEA MESSAGE#(5A)ROUT?
L21			SEA L20(P)AGENT#
L22			SEA L5 AND L21
1122		2	SEA IIS WAND IST

Search Options:

Search for both singular and plurals: YES
Search for spelling variants : YES
Display intermediate result sets : NO

Num	Search	Hits
#1	<pre>(predict? or model? or forecast? or simulat?) w/10 econom?</pre>	15703
#2	microeconom?	502
#3	#1 and #2	235
#4	agent?	9832
#5	#3 and #4	27
#6	<pre>(predict? or model? or forecast? or simulat?) w/5 (chang? or activit?) w/5 econom?</pre>	618
#7	#2 and #6	6
#8	artificial intelligence or neural network? or neurocomputer? or expert system? or heuristic?	4300
#9	#6 and #8	2

Search Options:

Search for both singular and plurals: YES
Search for spelling variants : YES
Display intermediate result sets : NO

Num	Search	Hits
#1	(predict? or forecast? or fore cast? or model? or	18
	<pre>simulat?) w/5 (chang? or activit?) w/5 econom?</pre>	
#2	microeconom?	31
#3	agent?	1853
#4	#2 and #3	0
#5	decisionmaker? or decision maker?	93
#6	#2 and #5	0
#7	#3 and #5	1
#8	#1 and #2	0

Search Options:

Search for both singular and plurals: YES
Search for spelling variants : YES
Display intermediate result sets : NO

Num	Search	Hits
#1	<pre>(predict? or forecast? or fore cast? or model? or simulat?) w/10 econom?</pre>	883
#2	decisionmaker? or decision w/1 (maker? or unit?)	64
#3	#1 and #2	2
#4	agent	1366
#5	#2 and #4	4
#6	microeconom? or microsimulat? or microanaly?	3
#7	#1 and #4	11
#8	<pre>(predict? or forecast? or model? or simulat?) w/5 (chang? or activit?) w/5 econom?</pre>	27
#9	#2 and #8	0
#10	#4 and #8	1

Set

Items

Description

```
(PREDICT? OR FORECAST? OR FORE(W)(CAST? OR TELL?) OR MODEL?
S1
        29216
              OR SIMULAT?) (7N) (CHANG? OR ACTIVIT?) (7N) ECONOM?
        22979
                 S1 AND PY<1997
S2
                 DECISION(W) (MAKER OR MAKERS OR UNIT OR UNITS) OR DECISIONM-
        79655
s3
             AKER??
          580
                S2 AND S3
S4
                 S3(S)AGENT??
S5
         1286
                S2 AND S5
           27
$6
           18
                RD (unique items)
s7
                MICROECONOM? OR MICROSIMULAT? OR MICROANALYTIC?
S8
        14711
S9
            6
                S7 AND S8
                AGENT? (20N) (DECISIONRULE?? OR DECISION(W) RULE?)
          100
S10
                S4 AND S10
S11
            7
                RD (unique items)
S12
            4
                AGENT? (20A) MESSAG?
            0
S13
        12065
                AGENT? (20N) MESSAG?
S14
S15
            0
                S7 AND S14
                S4 AND S15
S16
            0
                S4 AND S14
S17
            0
            7
                S2 AND S14
S18
            5
                RD (unique items)
S19
        10923
                ROUT? (5N) MESSAG?
S20
S21
            0
                S4 AND S20
                S4 AND S8
S22
           68
                S22 AND RULE??
           51
S23
           34
                RD (unique items)
S24
                S24 AND MESSAG?
            5
S25
           28
                S24 NOT S9
S26
                S26 NOT S12
S27
           27
                S27 NOT S19
           27
S28
                 S28 AND MESSAG?
S29
            4
           23
                 S28 NOT S29
S30
            9
                 S30 AND AGENT?
S31
S32
           14
                 S30 NOT S31
S33
          164
                 S4 AND AGENT??
S34
          115
                RD (unique items)
                 S34 AND LUCAS
S35
           12
                E1,E6-E8
S36
          286
                E4,E8-E9
S37
          203
S38
          341
                 S36 OR S37
S39
          114
                 E1,E5-E11
S40
          455
                 S38 OR S39
                AU="LUCAS ROBERT"
S41
            3
S42
          458
                 S40 OR S41
S43
            0
                 S4 AND S42
S44
            2
                 S2 AND S42
S45
            2
                 S8 AND S42
S46
            0
                 S3 AND S42
S47
            6
                 S42 AND AGENT?
S48
            6
                RD (unique items)
S49
          141
                 S42 AND PY<1982
                 S42 AND PY<1980
S50
           93
S51
           48
                 S49 NOT S50
S52
            9
                 S51 AND ECONOM?
            2
S53
                 S52 AND MODEL?
```